

SECOND POLAR YEAR PROGRAM

MESSAGE

FROM

THE PRESIDENT OF THE UNITED STATES

TRANSMITTING

A REPORT FROM THE SECRETARY OF STATE RELATIVE TO AN APPROPRIATION FOR PARTICIPATION BY THE UNITED STATES IN THE SECOND POLAR YEAR PROGRAM, AUGUST 1, 1932-AUGUST 31, 1933, AMOUNTING TO \$30,000

JANUARY 26 (calendar day, FEBRUARY 10), 1931.—Read; referred to the Committee on Foreign Relations, and ordered to be printed with an illustration

To the Congress of the United States:

I commend to the favorable consideration of the Congress the inclosed report from the Secretary of State, to the end that legislation may be enacted authorizing an appropriation of \$30,000 for participation by the United States Government in the second polar year program, August 1, 1932-August 31, 1933.

HERBERT HOOVER.

THE WHITE HOUSE,
Washington, February 10, 1931.

The PRESIDENT:

In 1875 Lieut. Karl Weyprecht, of Austria, first brought forward the definite program for an international "polar year." He maintained that the small scientific value of the results previously obtained by polar expeditions was due to their isolated character and concluded that expeditions should be arranged on a uniform plan to give simultaneous physical observations over a full year at a number of places in high altitudes. His plan came to fruition in the first International Polar Year, from August, 1882, to August, 1883, when

14 expeditions were sent to the field, 12 in the Arctic and 2 in the Antarctic, by 12 different countries, fully equipped for comprehensive meteorological and magnetic observations. The United States Government took part in this program, establishing stations at Point Barrow, Alaska, and Fort Conger (Lady Franklin Bay), Ellesmere Island. The practical and scientific results of the first International Polar Year were very great. For the first time it was possible to extend a systematic survey of the magnetic elements into the immediate neighborhood of the north magnetic pole. With the aid of meteorological observations taken on board ship over the North Atlantic and collected by the British meteorological office daily synoptic charts were prepared for a continuous region over North America and western Europe. These charts have formed the basis of many notable studies in weather forecasting.

The International Meteorological Conference held in Copenhagen in September, 1929, with representatives from 34 countries present, proposed a second international polar year program. This proposal found its stimulus in the many new problems that have arisen during the past 50 years requiring additional data for their solution. In that time the instruments and methods of observing and recording automatically geophysical phenomena have greatly improved. In particular has the interest been increased in inquiries relative to the upper air arising from air navigation and wireless communication, especially the correlations of the latter with variations of the earth's magnetism and electricity and with solar and other cosmic variations, and the effects of the latter on the availability of paths of radio communications under conditions prevailing at different times. There can be no question that the further accumulation of data bearing on geophysical phenomena as evidence in the Arctic and Antarctic in relation to similar data to be obtained simultaneously at practically all observatories throughout the world can not but be of inestimable scientific and economic value in the complex developments of present-day human activities, welfare, and utilization of scientific principles.

During the period August 1, 1932, to August 31, 1933, it is intended that a number of observation stations in the Arctic and Antarctic regions will be operated for observing and recording magnetic, electric, auroral, and meteorological phenomena during that period according to an internationally concerted schedule. There is inclosed a photostat copy of a map showing existing magnetic observatories, stations of 1882-83, and additional proposed stations for 1932-33 above 60° north latitude. Originally it was suggested by the special committee of the polar year, established to complete details and plans of the work at Leningrad in August, 1930, that the United States re-occupy, if possible, two of the stations of 1882-83, namely, Point Barrow, Alaska, and Fort Conger (Lady Franklin Bay), Ellesmere Island. Since an expedition to Point Barrow would be very expensive, and as reports from there state it is impracticable to recover the exact station occupied in 1882-83, it was agreed that more profitable results might be obtained at considerably less expenditure through a station near Fairbanks, Alaska, a point accessible at all times of the year by steamer and railway. There is at this place the additional advantage that there is already established through the generosity of the Rockefeller Foundation a first-order auroral station occupied by the Alaska Agricultural College and School of Mines at College (3 miles from Fairbanks), thus providing adequately for one part of

the program proposed. There is also at Fairbanks a meteorological station of the United States Weather Bureau.

With reference to the participation of other countries, 26 of the countries represented in the international meteorological organization have already made favorable replies as regards the proposed program. Arrangements for three stations in the Antarctic are in progress by the Argentine Republic and France.

The department of our Government primarily interested in this work is the Department of Commerce, a work of similar kind being done under its auspices by the Coast and Geodetic Survey. Other departments which have a vital interest in the polar year program are: The Department of the Navy, through its research laboratory, in the study of magnetic and auroral effects on radio transmission; the War Department, through its Signal Corps, in the development of radio and meteorological work in Alaska; the Department of the Interior, through its interest in development of resources in the Territory of Alaska; the Department of Agriculture, through its Weather Bureau, in meteorological investigations; the Post Office Department, through its air mail service in the North; and the Department of State, in its strengthening of international relations and good will.

The Department of Commerce was requested to express an opinion as to the desirability of this Government taking part in the proposed polar year program in 1932-1933. The Secretary of Commerce states that he considers it entirely fitting that the United States should participate in these polar year investigations and recommends that an appropriation of \$30,000 be made.

An estimate of the expenditures for magnetic work at Fairbanks, Alaska, includes the following: Instruments and equipment, \$8,000; nonmagnetic buildings, \$5,800; travel and transportation, \$1,010; personnel over a period of one and one-half to two years, \$12,190; compilation and publication, \$3,000; total, \$30,000.

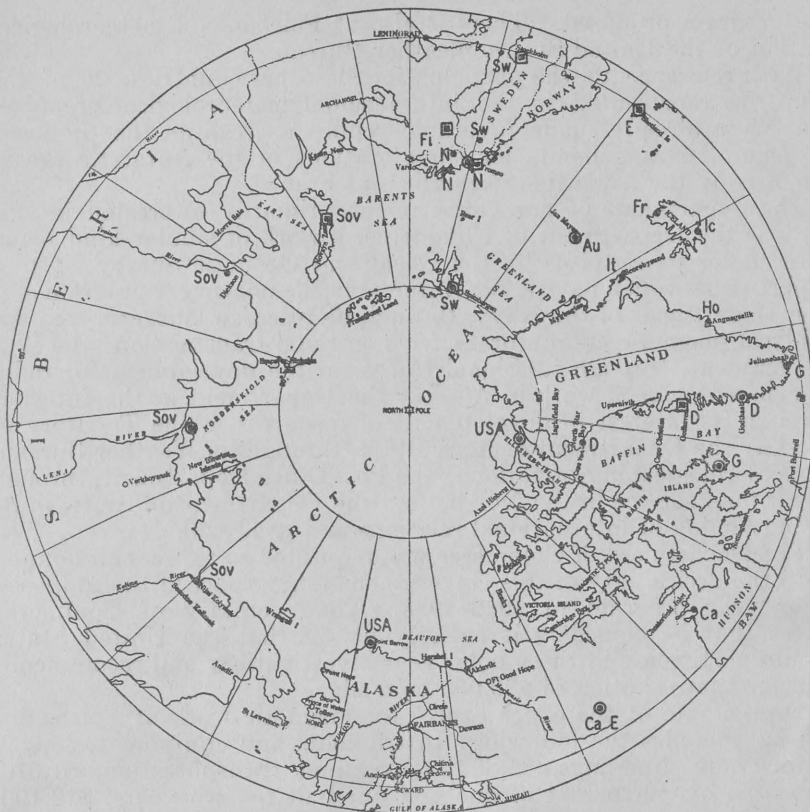
I concur in the opinion of the Secretary of Commerce that the United States should take part in these scientific investigations, and I, therefore, have the honor to recommend that the Congress be requested to enact legislation to the end that an appropriation of \$30,000 may be authorized for participation by the United States Government in the second polar year program, August 1, 1932-August 31, 1933.

As a matter of convenience, there is transmitted herewith a tentative draft of the proposed legislation.

Respectfully submitted.

H. L. STIMSON.

DEPARTMENT OF STATE,
Washington, February 9, 1931.



JUBILEE POLAR YEAR 1932-33

MAP SHOWING EXISTING MAGNETIC OBSERVATORIES, STATIONS OF 1882-83,
AND ADDITIONAL PROPOSED STATIONS FOR 1932-33 ABOVE 60° NORTH LATITUDE

□, existing magnetic observatories; ○, stations of 1882-83; ●, additional stations proposed for 1932-33. The governments responsible are indicated thus: A, Austria; Ca, Canada; D, Denmark; E, Great Britain; FI, Finland; Fr, France; G, Germany; Ho, Netherlands; Ic, Iceland; It, Italy; N, Norway; Sov, Union of Socialist Soviet Republics; Sw, Sweden; USA, United States of America

**DRAFT OF JOINT RESOLUTION AUTHORIZING AN APPROPRIATION TO DEFRAY
THE EXPENSES OF PARTICIPATION BY THE UNITED STATES GOVERNMENT IN
THE SECOND POLAR YEAR PROGRAM, AUGUST 1, 1932, TO AUGUST 31, 1933**

Resolved by the Senate and the House of Representatives of the United States of America in Congress assembled, That for the purpose of defraying the expenses of participation by the United States Government in the Second Polar Year program, August 1, 1932, to August 31, 1933, an appropriation of \$30,000, or so much thereof as may be necessary, is hereby authorized for personal services and rent in the District of Columbia or elsewhere, contingent expenses, official cards, printing and binding, purchase of necessary books, documents, and periodicals, camp and field supplies, scientific instruments and equipment, construction of necessary temporary buildings for housing equipment and for observations, hire, maintenance and operation of passenger-carrying motor vehicles, transportation and subsistence or per diem in lieu of subsistence (notwithstanding the provisions of any other act), stenographic and other services and purchase of supplies, materials and equipment by contract if deemed necessary, without regard to section 3709 of the Revised Statutes (U. S. C., title 41, sec. 5), and such other expenses as may be deemed necessary by the Secretary of State in furtherance of the project described, and the Secretary of State may transfer this fund, or so much as may be deemed necessary, to the Department of Commerce with the approval of the Secretary of Commerce for direct expenditure by the Coast and Geodetic Survey.